

LOW-LIGHT WITHOUT DISTORTION



This 550K pixel CMOS image sensor designed on **Teledyne e2v's** proprietary Eye-On-Si CMOS imaging technology is ideal for diverse applications where superior performance is required. The innovative pixel design offers excellent performance in low-light conditions with an electronic global (true snapshot) shutter, and offers a high readout speed at 60 fps in full resolution, and 80 fps in VGA mode. Very low power consumption enables this device to be used in battery powered applications.

KEY BENEFITS

- High QE, low-light CMOS sensor
- Global shutter
- 860 x 640 pixels @ 60 fps
- 5.8 μm square pixels with micro-lens
- Wide dynamic range (120 dB)
- Power supplies 3.3V & 1.8V
- Low power consumption
- Output format 8 bits parallel
- Operating temperature (-30° to +65°C)
- Package: μCLCC48 10 mm x 10 mm

APPLICATIONS

- Surveillance IP/CCTV cameras
- Industrial machine vision
- Biometric/medical imaging
- Automotive vision



Sensor Characteristics

Resolution – pixels	640 (V) × 838 (H)
Image size – inches	1/2.9
Pixel size – μm	5.8 × 5.8
Aspect ratio	4:3
Max frame rate – fps	60 @ full / 80 @ VGA
Pixel rate – Mpixels/s	48

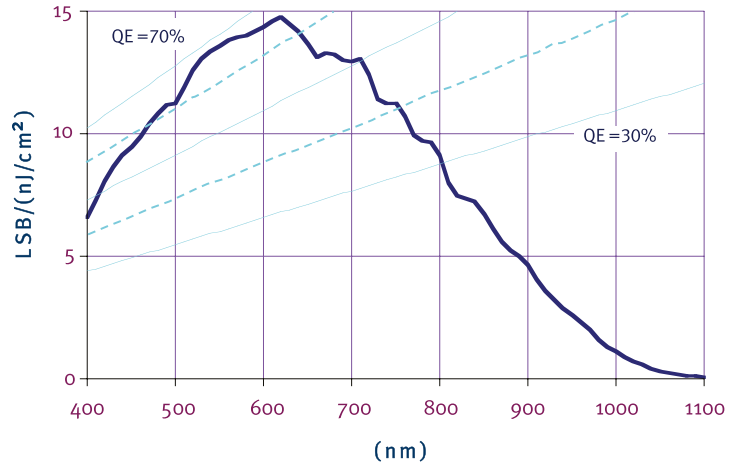
PIXEL PERFORMANCE

Bit depth – bits	8
Dynamic range – dB	>52 (linear) / >100 (HDR)
SNRmax – dB	>40
Responsivity – LSB8/(nJ/cm²)	15

MECHANICAL & ELECTRICAL INTERFACE

Power supplies – V	3.3 & 1.8
Power consumption	
Functional – mW	80
Standby – μW	40

SPECTRAL RESPONSE & QUANTUM EFFICIENCY GAIN = 1



ORDER CODES – JADE CMOS

	PRODUCTS
B&W	EV76C454BBT-EQV
MONO/COLOR	EV76C454BMT-EQV
BAYER	EV76C454BCT-EQV

For other CFA options please contact Teledyne e2v

SENSOR OVERVIEW

